

FIG. 1

10026065 "120701

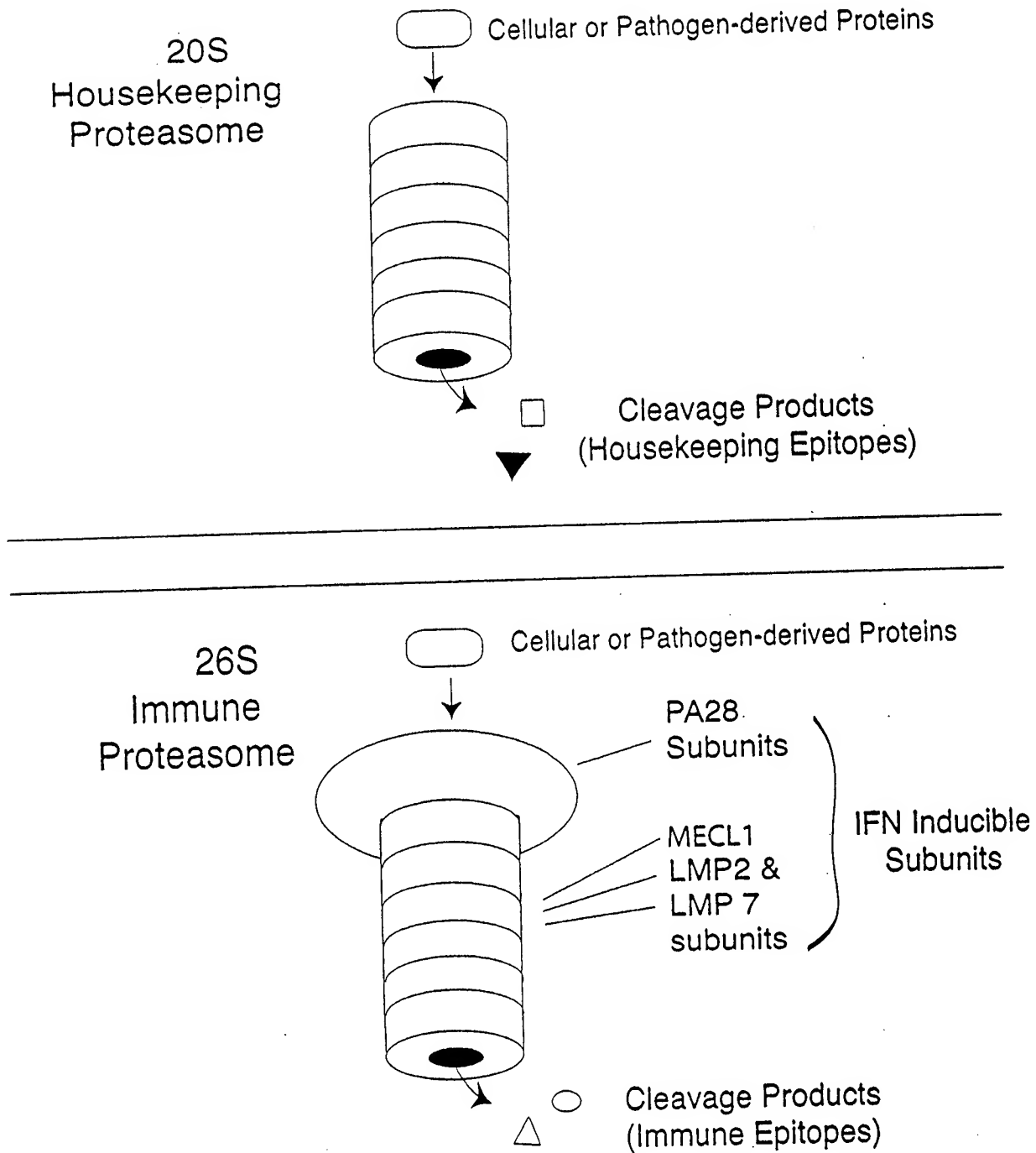


FIG. 2

"Antigen Synchronization" Between Infected Cell and APC Results in T cell Response That Recognizes Virus Epitope

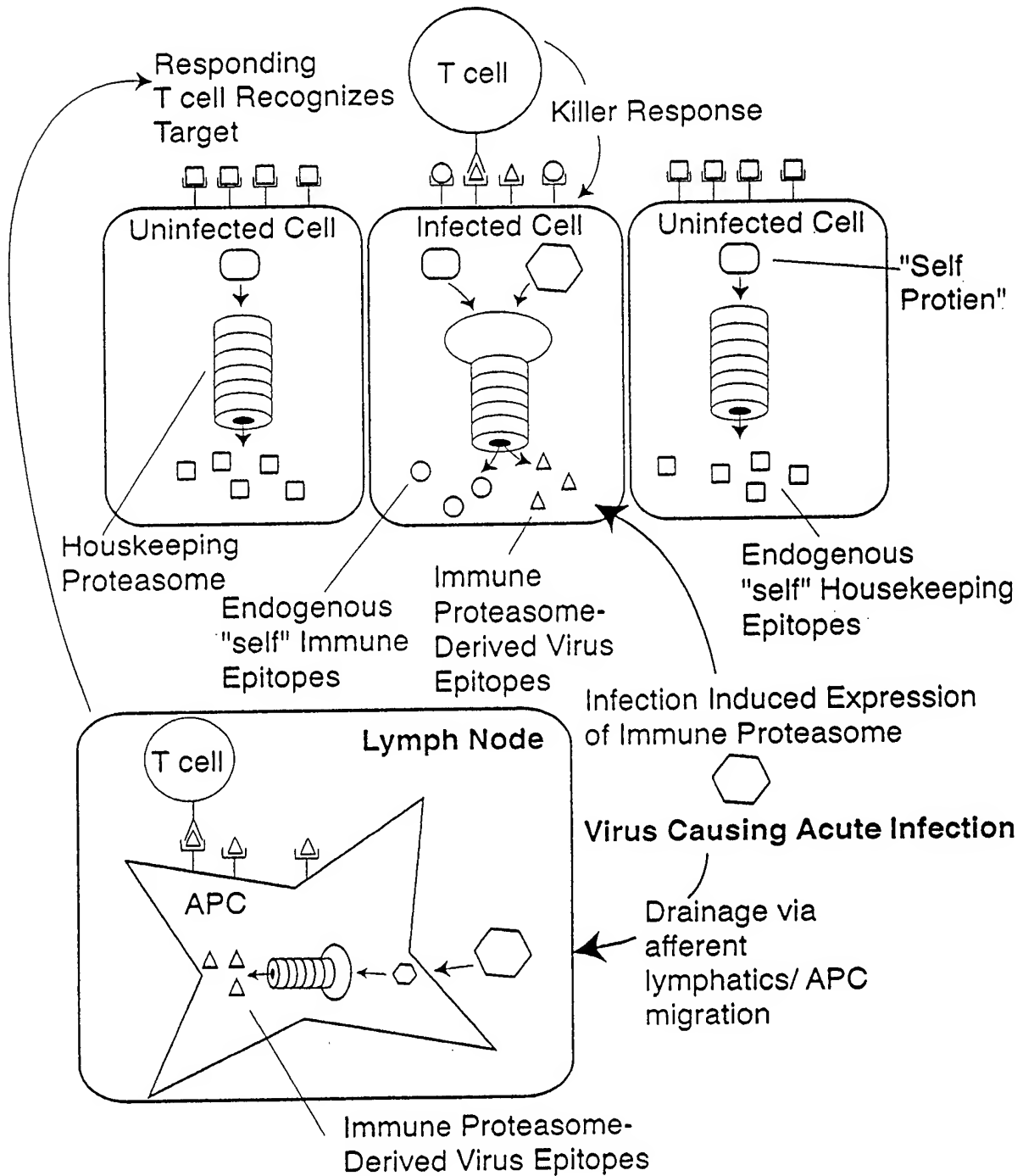


FIG. 3

T cell does not recognize Housekeeping Epitope (Tumor survives)

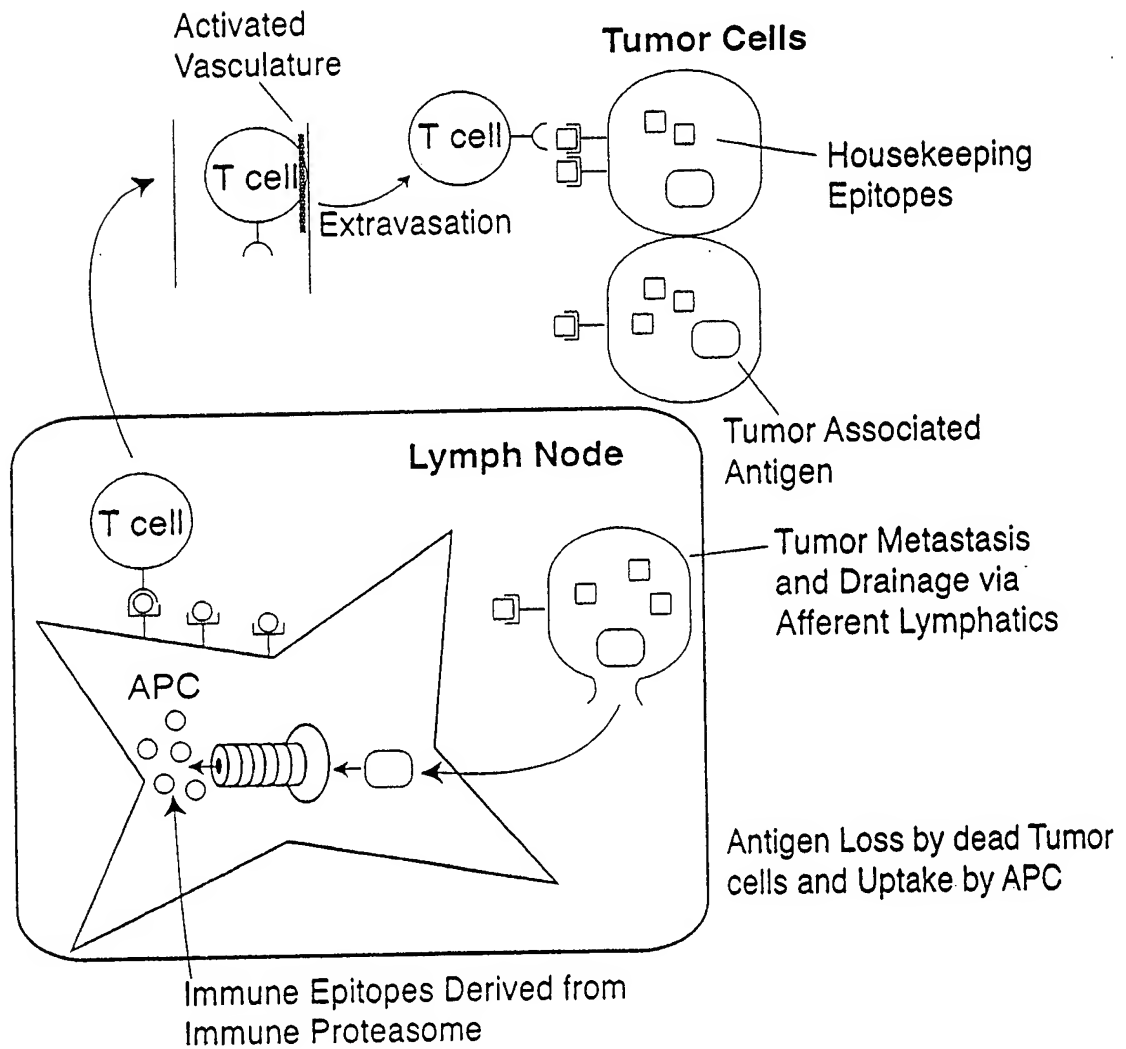
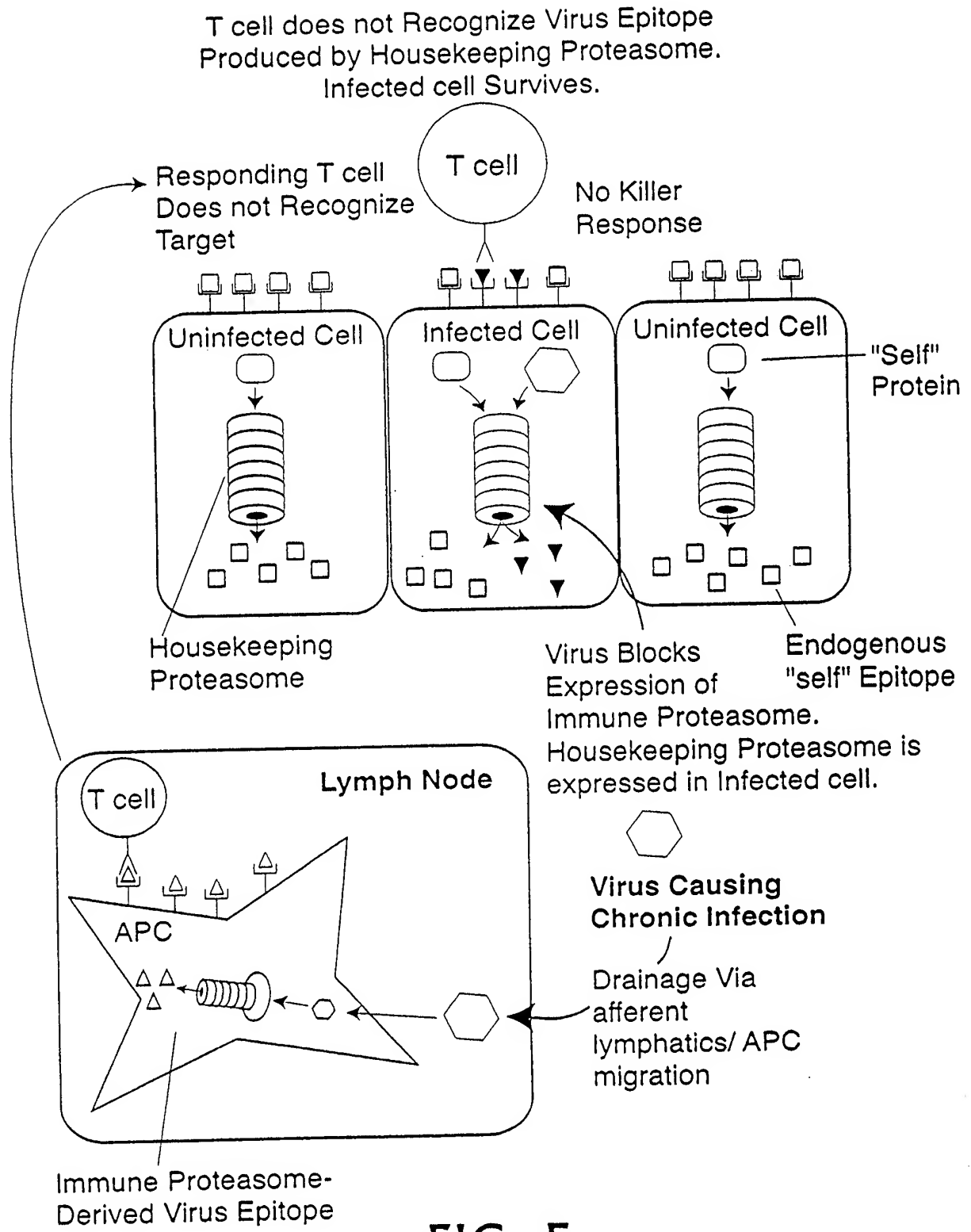


FIG. 4



**FIG. 5**

IFN $\gamma$  Production by T cell May Induce  
Expression of Immune Proteasome  
in some adjacent Tumor Cells. T cells  
kill Tumor cells.

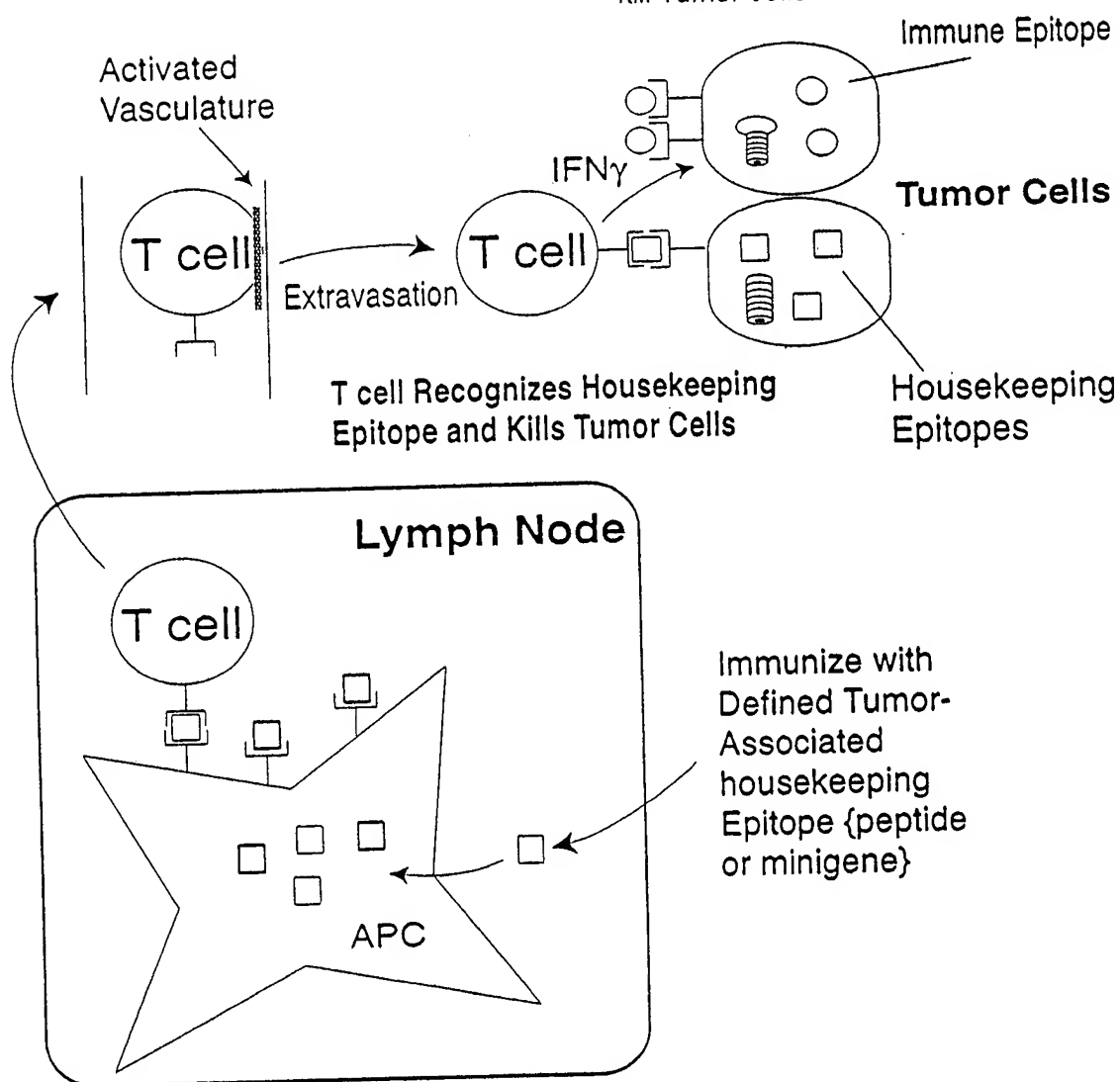


FIG. 6

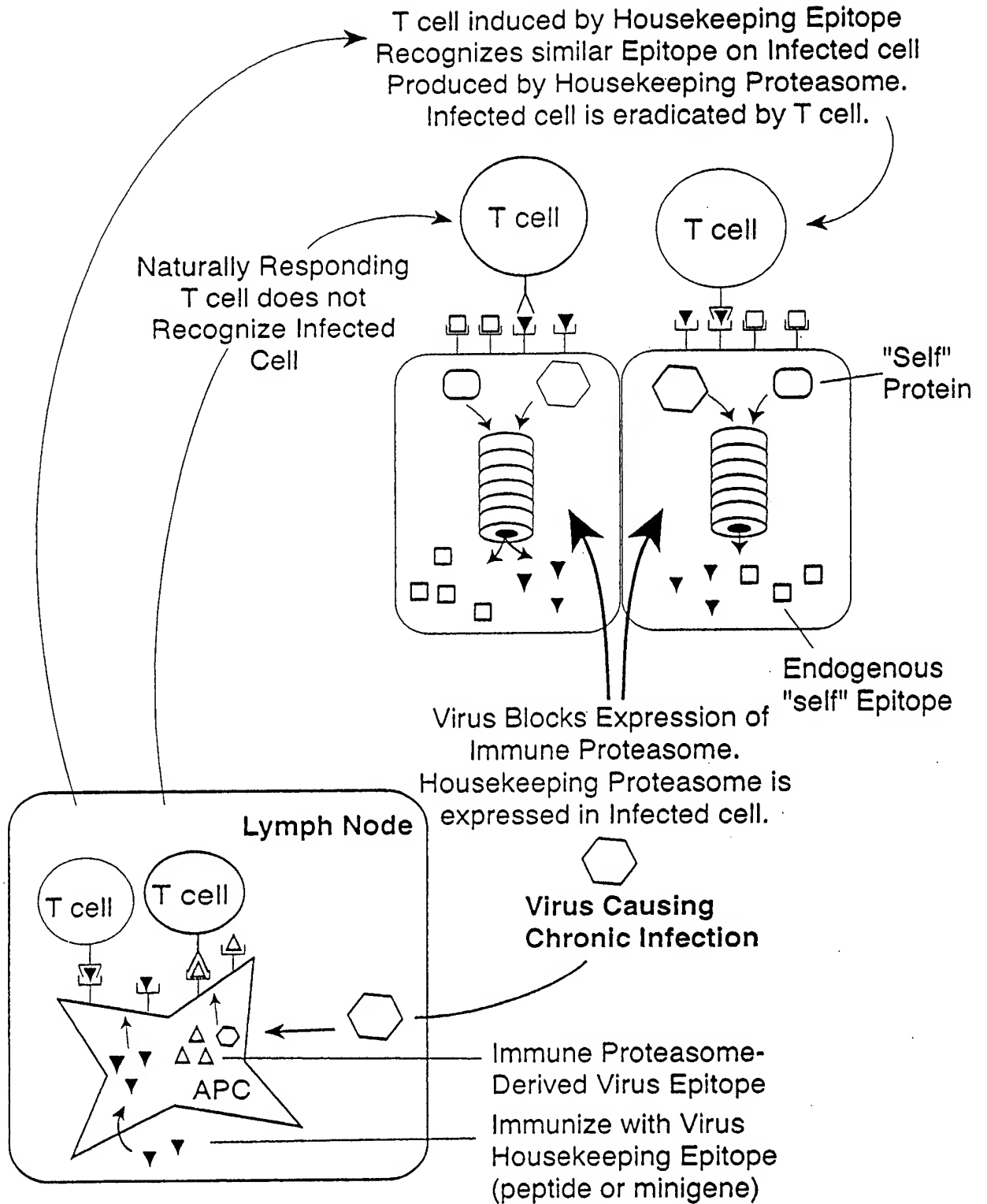


FIG. 7

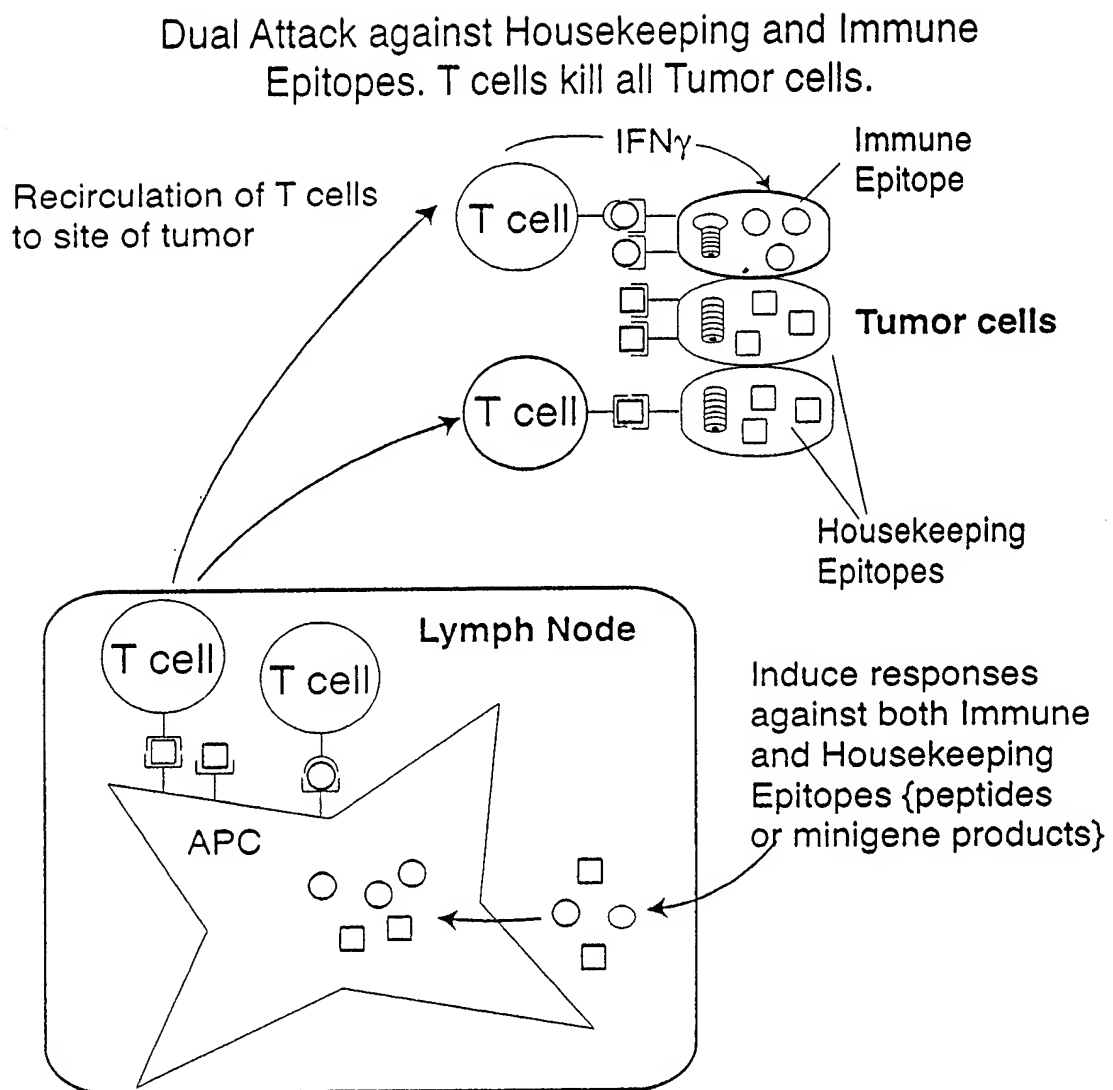
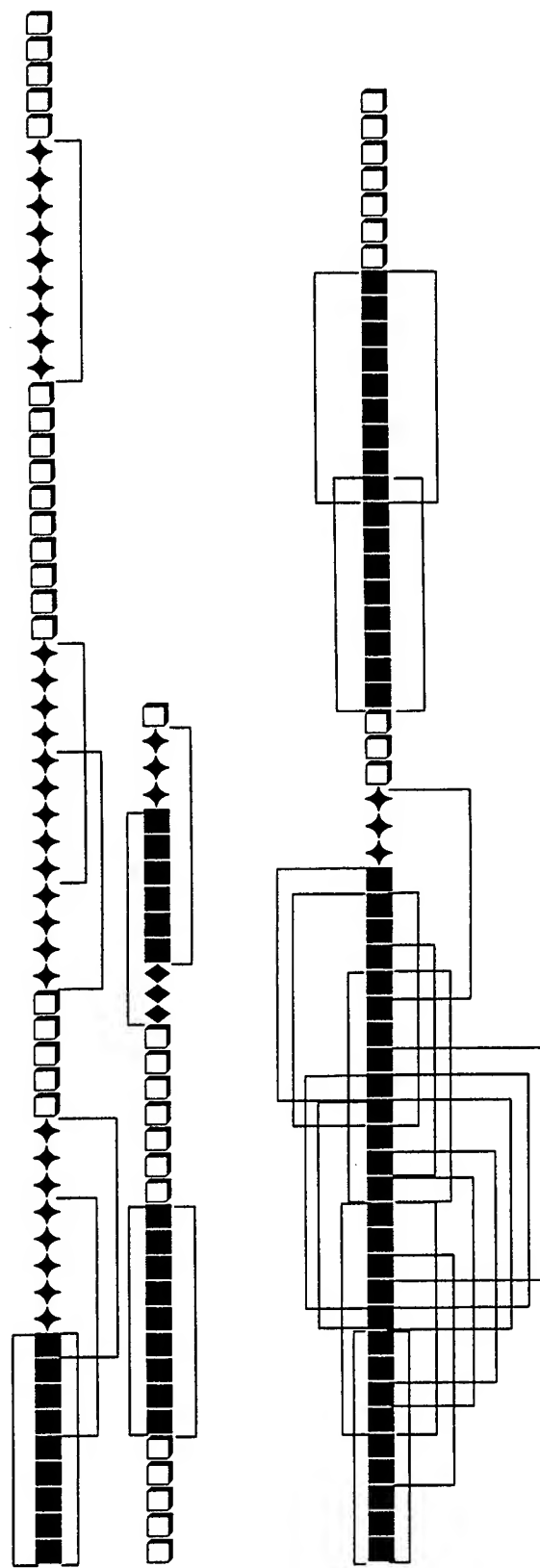


FIG. 8







- = an amino acid position not part of any epitope.
- = an amino acid position in an epitope according to both the SYFPEITHI and NIH algorithms.
- ◆ = an amino acid position in an epitope according to the NIH algorithm.
- ◆ = an amino acid position in an epitope according to the SYFPEITHI algorithm.

FIG. 9B

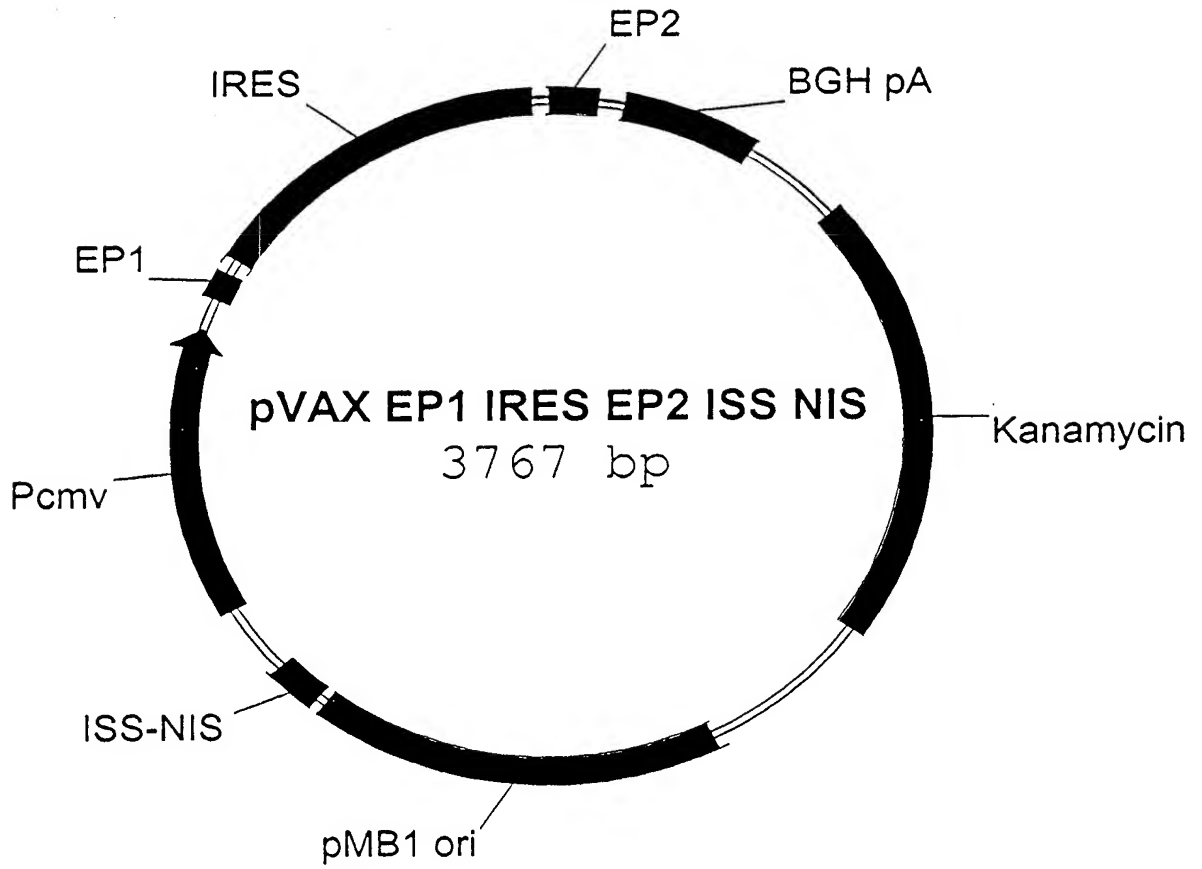


FIG. 10 A

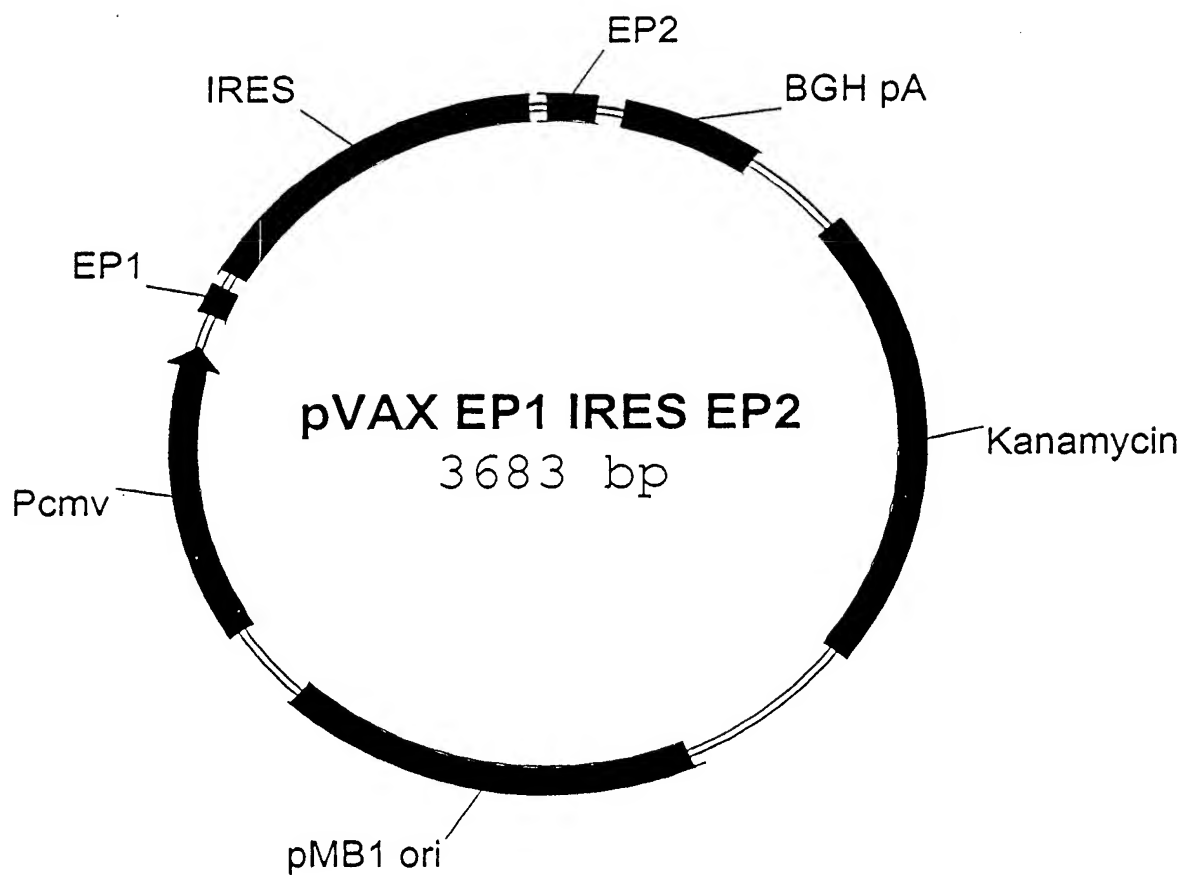


FIG. 10 B

10026056.120701

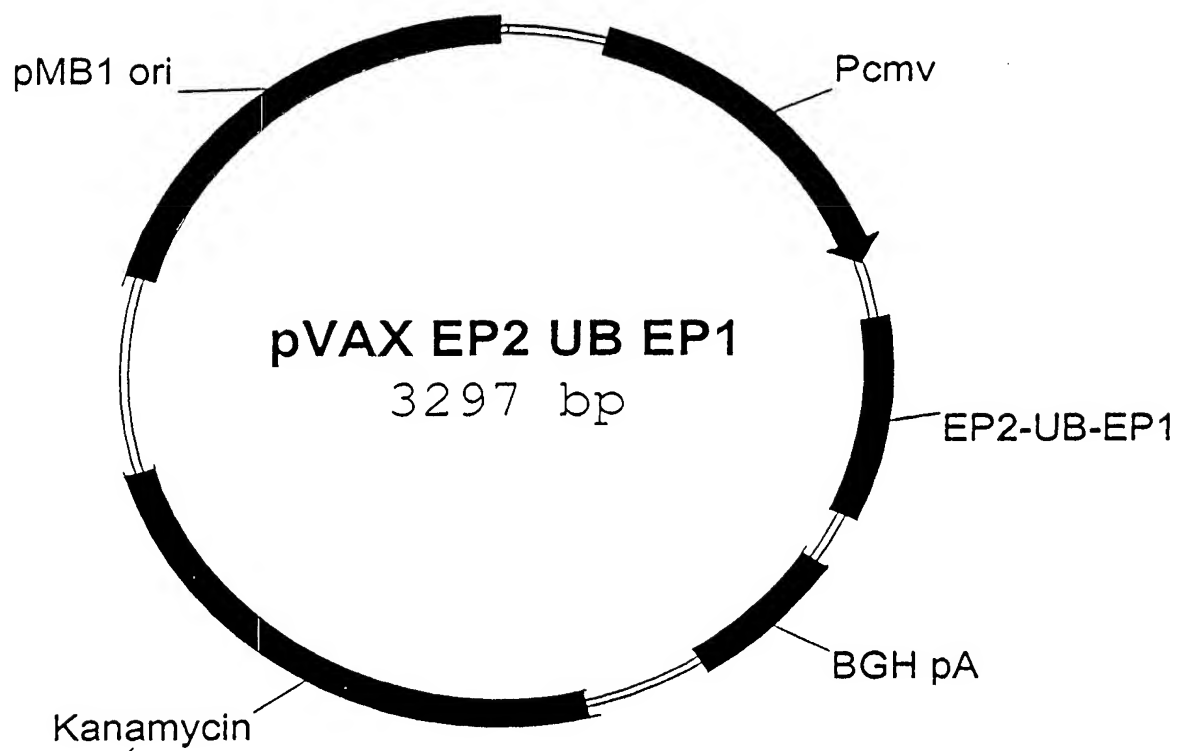


FIG. 11

10026066-120701

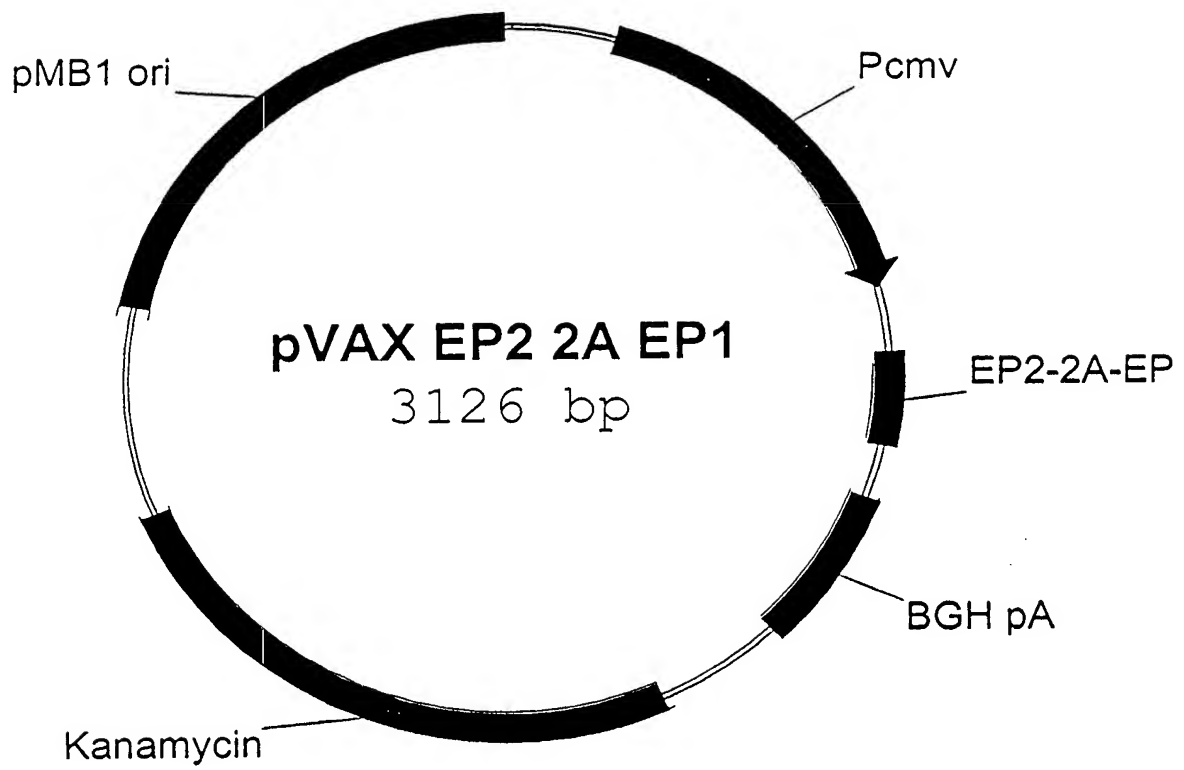


FIG. 12

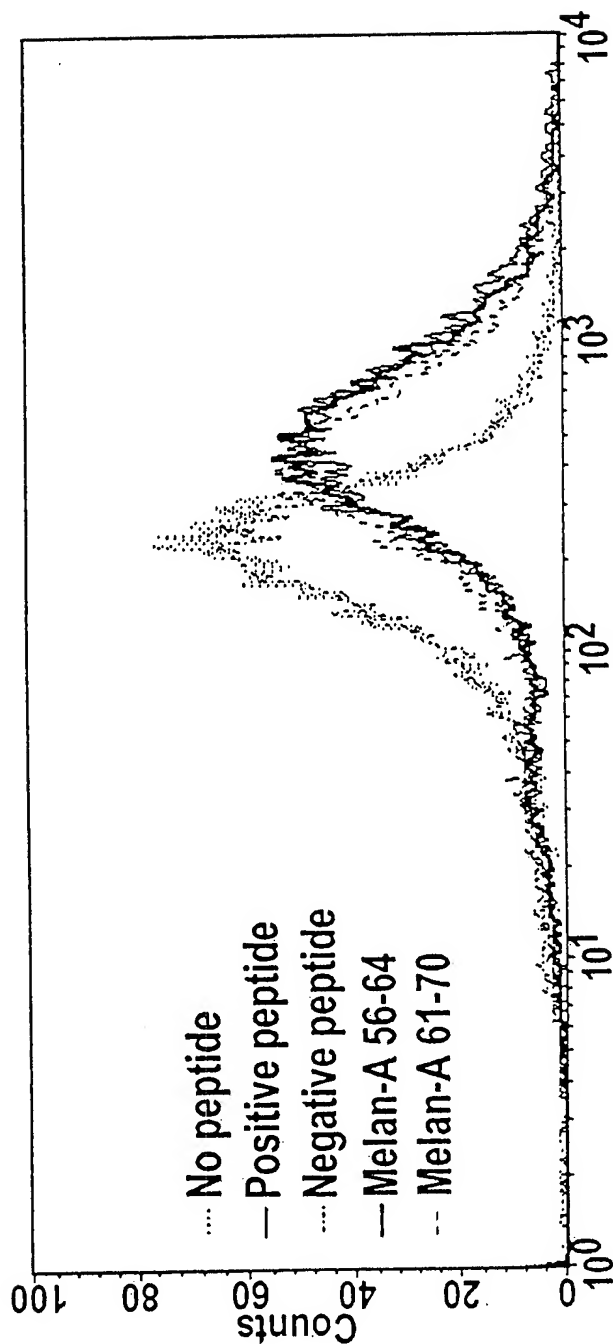
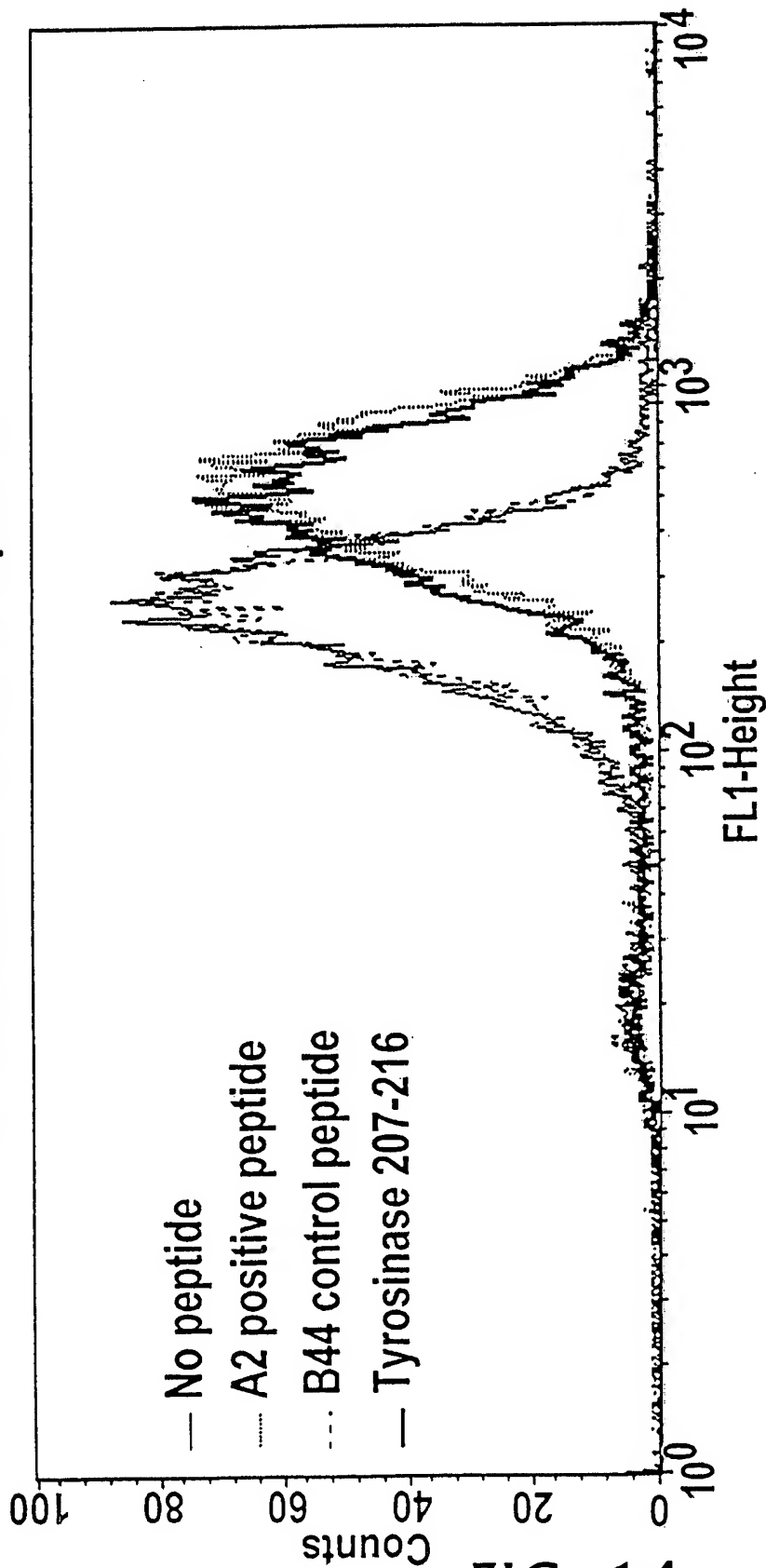


FIG. 13

### FL1-Height

| No Peptide          |        |        |            | A2 Positive peptide        |        |        |            |
|---------------------|--------|--------|------------|----------------------------|--------|--------|------------|
| File: Data.004      |        |        |            | File: Data.005             |        |        |            |
| Total Events: 10000 |        |        |            | Total Events: 10000        |        |        |            |
| Marker              | Events | %      | Total Mean | Marker                     | Events | %      | Total Mean |
| All                 | 10000  | 100.00 | 238.79     | All                        | 10000  | 100.00 | 604.21     |
| Melan-A 56-64       |        |        |            | Melan-A 61-70              |        |        |            |
| File: Data.009      |        |        |            | File: Data.011             |        |        |            |
| Total Events: 10000 |        |        |            | Total Events: 10000        |        |        |            |
| Marker              | Events | %      | Total Mean | Marker                     | Events | %      | Total Mean |
| All                 | 10000  | 100.00 | 535.86     | All                        | 10000  | 100.00 | 481.94     |
|                     |        |        |            | Potitive peptide FI = 1.53 |        |        |            |
|                     |        |        |            | Melan-A 56-64 FI = 1.24    |        |        |            |
|                     |        |        |            | Melan-A 60-69 FI = 1.02    |        |        |            |

# Tyrosinase peptide 207-216 binds to human MHC I on T2 cells and enhances its expression



Anti-human class I, FITC-anti-mouse IgG2a

FIG. 14



# Melan-A Class I HLA-A2 Epitopes

FIG. 15

MPREDAHF I YGYPKKGHGHSY TTAEEAAGIGILT VILGVLLLLIGCWYCR

RRNGYRALMDKSLHVG TQCALTRRC P QEGFDHRDSK VSLQEKNC EPVVP

NAPPAYEKL SAEQSP PPYPSP

SSX-2

MNGDDAFARRPTVGAQIPEKIQKAFDDIAKYFSKEEWEKM

KASEKIFVVMKRKYEAMTKLGKATLPPFMCNKRAEDFQ

GNDLDNDPNRGNOVERPQMTFGRLOGISPKIMPKKPAEEG

NDSEEVPEASGPQNDGKELCPPGKPTTSEKIHRSRGPKRG

EHAWTHRLRERKQLVIYEEISDPPEEDDE

FIG. 16

NY-ESO

MQAEGRGTTG STGDADGPGG PGIPDGPCCN AGGPGGAGAT

GGRGPRGAGA ARASGPGGGA PRGPHGGAAS GLNGCCRCGA

RGPEs [RLLEFYLAM] PFATPMEAEELARRSLAQDAPPLPVP

[GVLLEKFTVSGN] [ILTIRLTAA] DHR

[QLQLSISSCLQ] [QLSLLMWIT] [QCFLPV] [FLAQ] [PPSGQRR]

FIG. 17

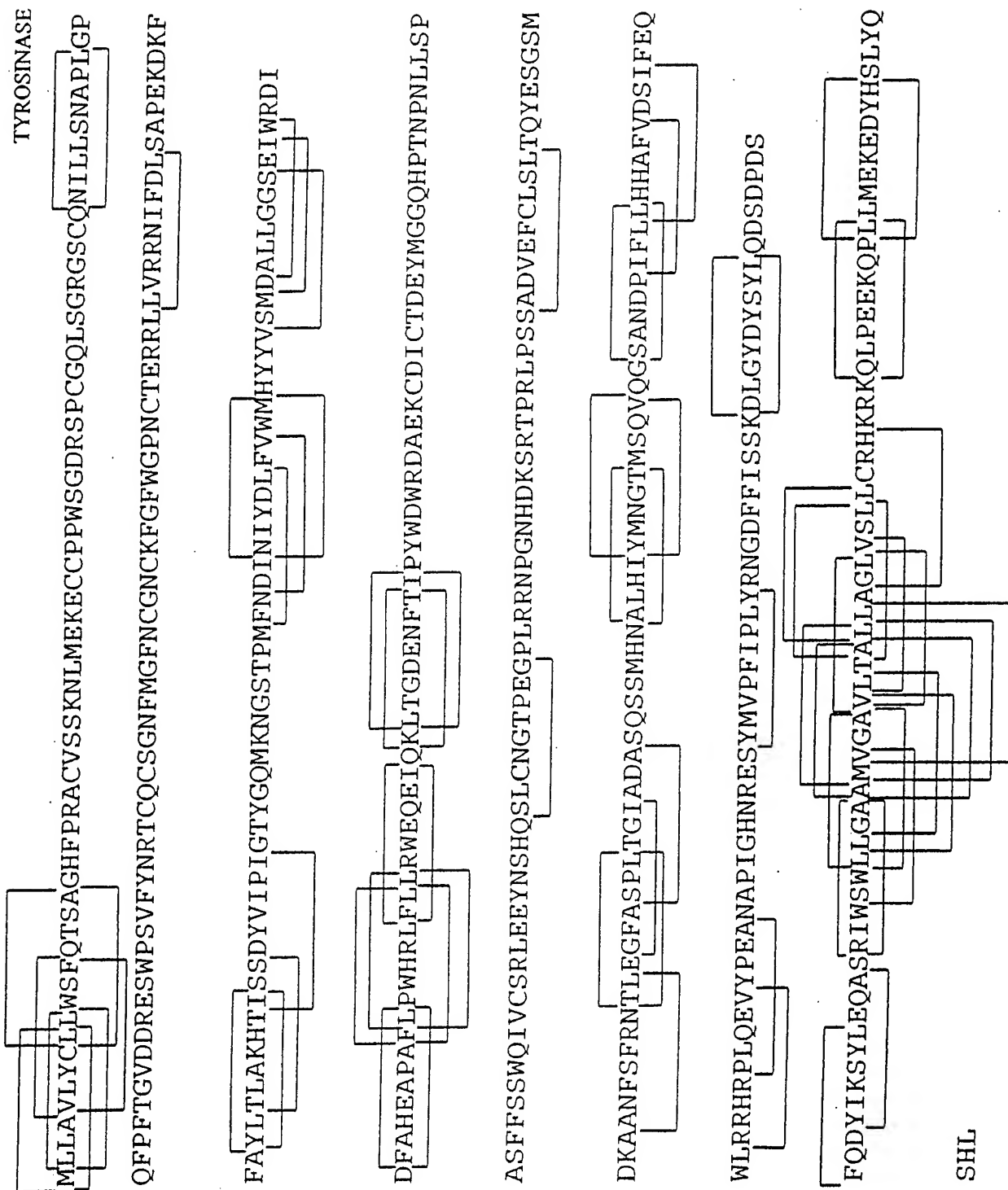


FIG. 18